

REMARKS/ARGUMENTS

The Office Action dated November 1, 2007 has been received and carefully studied. In addition, the applicant wishes to thank the Examiner for his time during the telephonic interview of January 18, 2007.

The Examiner rejects claims 1-8, and 20-25 under 35 U.S.C. §102(e) as being anticipated by Ikonen (U.S. Patent No. 7,003,575). With respect to claims 1, 3, 24, and 25, the Examiner states that Ikonen teaches a method and a respective computer program for operating a computer network server in a computer network comprising maintaining a connection with a central node, receiving a command from said central node to open a listening port after central node receives a request from a client to access said server, opening a listening port, sending to the central node instructions for the client to connect to the server over the listening port and receiving communication from the client after the central node delivers a command to the client to connect to the server.

This rejection is respectfully traversed. First, with respect to claims 1 and 24, those claims require that the server access the central node, obtain network addresses for the intended clients, and establish a connection to those clients. The Examiner does not recite these steps in the Office Action, rather only the steps associated with claims 3 and 25 are discussed. Furthermore, this method of communication between the server and the client is not discussed in the Ikonen reference. Specifically, Ikonen does not disclose that the server establishes a connection

to specific clients. Rather, Ikonen discloses that the client always initiates communication with the server. In response to this argument, the Examiner states that the language used in the claim "establishing" is broad and does not indicate which party is the initiator. Although the applicant disagrees with this assertion, to expedite allowance, claims 1 and 24 have been amended to clearly recite that it is the server that initiates the connection with the clients. Thus, in view of this amendment, claims 1 and 24, and all claims dependent on those claims are believed to be in condition for allowance.

With respect to claim 3, the Examiner states that Ikonen discusses all of the recited steps and cites specific passages in columns 8 and 9 for support. This rejection is respectfully traversed. In response to the last office action and the subsequent telephonic interview, the Examiner stated that the rejection assumes that the redirection database 703 corresponds to the server in the present claim, and the server 702 of Ikonen corresponds to the central node in the present claim. Even assuming this configuration, Ikonen does not anticipate the present claim. Referring to Figure 7, the communication mechanism is quite different. Client 701 connects to server 702. Server 702 requests a service address from redirection database 703. The redirection database 703 responds to the server 702, and either deasserts the redirection flag (see Figure 7) or asserts the redirection flag (see Figure 8). If the redirection flag is not asserted, communication between client 701 and server 702 is continued. If the redirection flag is asserted (as shown in Figure 8), the server 802 directs the client 801 to a different server

having the requisite service address. The client 801 then connects to that second server 804.

This communication is markedly different than that recited in claims 3 and 25. For example, the fourth recited step requires "sending to said central node instructions for said client to connect to said server over said listening port". However, in Ikonen, no communication is ever conducted between the client 701 and the redirection database 703 (which the examiner considers to be the server) and no connection is ever made or attempted. The communication between the redirection database 701 and the server 702 is simply to tell the server whether it should communicate with the client, or direct the client to a different server 804. No communication is ever suggested or disclosed between the client and the redirection database. Thus, the fourth step of claim 3 is not anticipated by Ikonen.

In addition, the final step requires the server to receive "communication from said client over said listening port after said central node delivers a command to said at least one client to connect to said server". Again, the Examiner assumes that the redirection database 703 corresponds to the server in the claim, and that the server 702 corresponds to the central node. Using this configuration, Ikonen does not disclose that the redirection database 703 received communication from the client after the server 702 delivers a command to the client to connect to the redirection database. The server 702 instructs the client whether it should communicate with the server 702 or a different server 804. There is no

suggestion that the client ever communicates with the redirection database 703. The line labeled 807 in Figure 8 of Ikonen simply shows the client connecting to server 804; there is no communication to or through the redirection database suggested or disclosed. Thus, the fifth step of the method recited in claim 3 is also not anticipated by Ikonen.

Furthermore, Ikonen discloses a method for solving a completely different problem than the present invention. Ikonen is concerned with sharing the load between a number of accessible servers. It accomplishes this by having a redirection database which determines whether a client, after making initial contact with a server, should be allowed to continue communicating with that server, or whether another server is a more appropriate target of the client's communications. In fact, claim 1 of Ikonen recites that method of communication begins with a packet sent from the client to a first server. This method of communication allows communication between a client and one or more servers. In stark contrast, the present invention attempts to minimize access to the server, unless properly authorized by a central node. Thus, while the client initiates contact with the server in Ikonen as the first step of the process, such a client-server contact is the final step of the communication process in the present invention. All communications before that point are between the central node and the server or the central node and the client. However, in Ikonen, the client always communicates with servers, and never with the redirection database. Thus, claim 3 and all claims dependent on that claim are

not anticipated by Ikonen and are believed to be in condition for allowance.

The Examiner also rejects claim 25 for this same reasons listed above. Since claim 25 recites a computer program having the means to implement the steps recited in claim 3, it is not anticipated by Ikonen for the reasons stated above.

The Examiner rejects claim 2, noting the Ikonen discloses a Network Translation device. Claim 2 is dependent on claim 1. By virtue of the accompanying amendment, claim 1 is believed to be in condition for allowance. Thus, claim 2 by virtue of its dependence on claim 1 is believed to be allowable.

The Examiner rejects claim 4, stating that Ikonen discloses a predetermined listening time of less than one second. This rejection is respectfully traversed. Ikonen never discusses or discloses any information concerning the accessibility of the listening port, and clearly never discloses this time as being less than one second. Furthermore, this claim is allowable due to its dependence on claim 3, as described above.

The Examiner rejects claim 5, stating that Ikonen discloses closing the listening port after receipt of a communication, noting that closing the port is inherent. This rejection is respectfully traversed. There is no disclosure that the server closes the listening port after receipt of the message. In fact, it is obvious that the listening port remains accessible since other clients can

and are allowed to access the server. Furthermore, this claim is allowable due to its dependence on claim 3, as described above.

The Examiner rejects claim 6, stating that Ikonen discloses establishing a network connection after receipt of a communication. This claim is allowable due to its dependence on claim 3, as described above.

The Examiner rejects claim 7, stating that Ikonen discloses that the server closes its listening port if it receives communication from other than the authorized client, citing column 10, lines 1-30. Ikonen, neither in the cited passage nor anywhere in the specification, discloses that the server will close its listening port if accessed by an unauthorized client. In fact, as mentioned above, the server is generally available for communication from all clients, and thus such an action would not be beneficial for a load sharing application. Furthermore, this claim is allowable due to its dependence on claim 3, as described above.

The Examiner rejects claim 8, stating that Ikonen discloses a persistent connection with the central node. This claim is allowable due to its dependence on claim 3, as described above.

The Examiner rejects claim 20, stating that Ikonen discloses a computer system, comprising a central node, a server and at least one authorized client, wherein said server is adapted to receive notification from said central node that said authorized client wishes to communicate with

said server and in response to said notification, is adapted to open a listening port for said authorized client to connect to and sends instructions to said central node to notify said authorized client to communicate to said listening port. The Examiner cites the passages listed above and Figures 7 and 8 for support.

It is unclear from the Office Action how the Examiner interprets Ikonen to make this rejection. Ikonen describes two scenarios for load sharing, shown in Figures 7 and 8. If the Examiner is applying the scenario described in Figure 7, the rejection is improper. Claim 20 requires that the server opens a listening port after being notified by the central node and then sends instructions to the central node to notify the client. In Figure 7, it is clear that the client communicates directly with the server before the central node ever notifies the server of the client's intention. Furthermore, the server never sends instructions to the central node to notify the client to communicate on the listening port (since communication is already occurring). Even if the Examiner is treating the redirection database 703 as the server and the server 702 as the central node, the rejection is still improper. Using this interpretation, the client of Ikonen never "wishes to communicate" with the redirection database as recited in claim 20. The only communications to the redirection database 703 are from the server 702 verifying the proper server with which the client should communicate.

If the Examiner is applying the scenario shown in Figure 8, and treating server 1 as the "server" as recited in the present claim, the rejection is improper. Server 1

communicates with the client before any notification by the server. In fact, the notification that is received informs the server 1 to terminate, not initiate, communications with the client. Again, the server never sends instructions to the central node to notify the client to communicate on the listening port. Lastly, if the Examiner is applying the scenario shown in Figure 8, and treating server 2 as the "server" as recited in the present claim, the rejection is still improper. In figure 8, server 2 is never notified by the central node of the client's desire to communicate. Rather, the only communication to which server 2 is a participant is between the client and server 2. Server 2 has no interaction at all with the central node. Finally, if the Examiner is treating the redirection database 803 as the server, the rejection is still improper, as the client never communicates with the redirection database as recited in the claim. Thus, claim 20 and all claims dependent on claim 20 are believed to be in condition for allowance.

The Examiner rejects claim 21, stating that the server is adapted to close the listening port if an unauthorized client attempts to communicate. As explained above, this is not disclosed in Ikonen, and would not be beneficial to a load sharing application where multiple clients are in communication with multiple servers. Furthermore, this claim is allowable due to its dependence on claim 20, as described above.

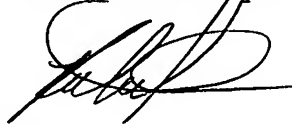
The Examiner rejects claim 22, stating that Ikonen discloses establishing a network connection after receipt of a communication. This claim is allowable due to its dependence on claim 20, as described above.

The Examiner rejects claim 23, stating that Ikonen discloses closing the listening port after receipt of a communication, noting that closing the port is inherent. This rejection is respectfully traversed. There is no disclosure that the server closes the listening port after receipt of the message. In fact, it is obvious that the listening port remains accessible since other clients can and are allowed to access the server. Furthermore, this claim is allowable due to its dependence on claim 20, as described above.

The Examiner rejects claims 9-11 as being unpatentable under 35 U.S.C. §103(a) over Ikonen. The Examiner takes official notice that encrypting communication packets is old and well known in the art for establishing secure communications. However, these claims are allowable due to their dependence on claim 3, which is believed to be in condition for allowance, based on the earlier arguments.

Reconsideration and allowance are requested in view of the foregoing arguments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Robert Frame', with a stylized flourish at the end.

Robert Frame

Reg. No. 54,104

176 E. Main Street-Suite 5

Westboro, Massachusetts 01581

TEL: (508) 898-1818